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UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH ADMINISTRATION
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Vol. 1 July 31, 1951 No. 1

Items of Unusual Interest

A clover head weevil (Miccotrogus picirostris (F.)) -- Specimens for first time found in Ohio, were collected on alsike clover on U. S. highway 23, south of Perryburg in Wood Co., June 4, 1951. (W. A. Baker, EPQ). (Det. Rose W. Warner). This insect is common in Pacific Northwest.

Cotton leafworm (Alabama argillacea (Hbn.)) -- First 1951 U. S. record, Cameron Co., Tex. July 17. Latest date on record July 18, 1949 Calhoun Co., Tex.

Summary of Insect Conditions

European corn borer pupation and some emergence of first brood occurred in southern part of Corn Belt and New Jersey by July 19. Hatching in progress in northern part. Indications that oviposition in northern areas higher than in central and southern, also a relatively high establishment and survival of larvae.
Grasshopper populations increasing late in June in southern Yuma Co. and Prospect Valley, Weld Co., Colo., also in western and southwestern Kansas. Control practiced in three Utah Counties. Infestation on 100,000 acres of range land in Humboldt Co., Calif.
Corn earworm damaged sweet corn in Delaware.
Greenbug damaged field of oats in Michigan.
Alfalfa weevil destructive in northeastern Utah and in the Big Horn Basin of Wyoming.
Codling moth populations remained generally light throughout country but there was a definite increase in many sections late in July.
Red-banded leaf roller on increase; in some instances more abundant than at this time last year.
Oriental fruit moth infestations somewhat heavier in northern and eastern Indiana than in 1950. Some injury occurred in Ohio and New Jersey.
Plum curculio infestations throughout the country lighter than in 1950.
European red mite populations in localized areas of Indiana, New Jersey, and Ohio heavy enough to warrant control measures during July.
Two-spotted spider mite populations on the increase in some areas.
Mexican bean beetle damaged beans late in July in Delaware, Ohio, Tennessee, and Utah.
Pea aphid problem on canning peas over in most sections owing to harvest, but reported as causing some damage in Wyoming and Wisconsin.
Potato leafhoppers caused serious damage to potatoes in Ashe Co., N. C.
Flea beetles damaged potatoes at Columbus, Ohio, eggplant at Charleston, S. C.
Tomato fruitworms and hornworms damaged tomato in Delaware.
Onion thrips present in damaging numbers in northwestern Tennessee, Utah, and western slope of Colorado.
Boll weevil not so abundant in most areas of the Cotton Belt as in 1949 and 1950.
Bollworm infestation light in general.

CEREAL AND FORAGE INSECTS

European corn borer (Pyrausta nubilalis (Hbn.)) -- Pupation and some emergence of first-brood noted by the middle of July in the southern part of the infested area of the corn belt and in New Jersey. Hatching still in progress in northern part. Observations in the northern areas indicate oviposition somewhat higher than in the central and southern region. Early indications in many areas point to a relatively high establishment and survival of larvae. (EPQ). Damage to tassels heavy near Magnolia, Del. (Late News About Insects, Univ. of Del.). Forty percent of the cornfields examined third week of July in Howard, Carroll, Frederick, and Washington Counties in Maryland infested. One-fourth of the Eastern Shore fields infested, with 1.2 borers per stalk in infested fields. (T. L. Bissell). Larvae found in harvested sweet corn in southwestern Michigan the middle of the month. (R. Hutson). First-brood moth flights declined in all districts of Minnesota the third week of July. Heaviest infestation occurs in the southwestern part of the State. (Minn. Dept. Agr. European Corn Borer Inf. Bul.). Hatching nearly complete in the southern and southeastern part of the corn-growing district of North Dakota by third week of July. Shot-hole injury prevalent in all localities, ranged from very heavy in some parts of Richland County to light in the upper part of the corn-growing district. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.).

Grasshoppers (Acrididae) -- Serious infestation developing in southern Yuma County, Colo. Populations numbered 10 to over 250 per square yard. Little damage noticeable due to adequate moisture and good range. Severe infestation in Prospect Valley of Weld County, Colo., migrating from marginal growth fields of small grain and alfalfa. Population of over 100 per square yard common in marginal vegetation in Cheyenne, Greeley, Sherman, and Wallace Counties of northwestern Kansas; field populations, however, not over 3 per square yard. In Grant, Morton, Stanton, and Stevens Counties of southwestern Kansas, 20 or more per square yard throughout fields. Control operations carried on in Iron, San Pete, and Garfield Counties, Utah. Infestations of 5 to 50 hoppers per square yard on 100,000 acres of mountain range lands in Humboldt County, Calif. (EPQ Report June 17 to 30). Infestations in North Dakota scattered and generally light, third week of July. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.). Abundant in some places in northwestern Idaho, where the adult stage had been reached by middle of July. (J. R. Douglass, EPQ).

Corn earworm (Heliothis armigera (Hbn.)) -- Damage to sweet corn in Delaware during July. (Late News About Insects, Univ. Del.). Sweet corn from a sprayed field in Montgomery County, Md., had 1 ear in 7 infested. (T. L. Bissell). Larvae maturing in larger numbers than expected in early market corn in Illinois. (European Corn Borer Bul., Ill. Nat. Hist. Surv.).

Greenbug (Toxoptera graminum (Rond.)) -- Destroying a field of oats near East Lansing, Mich., first half of July. (R. Hutson).

Fall armyworm (Laphygma frugiperda (A. & S.)) --On late corn in Lonoke County, Ark. (G. Barnes).

Cereal thrips (Limothrips cerealium (Hal.)) -- Injury in many barley and oats fields in North Dakota the third week of July. (Weekly Ins. Pest Inf. Bul.,

N. D. Agr. Coll.).

Corn sap beetles (Carpophilus spp.) -- Adults abundant during late July in sweet corn fields in Maryland. (T. L. Bissell). More abundant than usual in sweet corn fields in Virginia. (C. R. Willey).

Brown wheat mite (Petrobia latens (Mull.)) -- Serious damage in a number of wheat and other small grain fields in Juab County, Utah, the first week of July. (G. F. Knowlton).

Leafhoppers (Cicadellidae) -- Potato leafhoppers (Empoasca fabae (Harr.)) abundant on alfalfa in middle of July, Anne Arundel County, Md., causing considerable yellowing. (T. L. Bissell). Leafhoppers severe on alfalfa and clover in localized districts in the northwestern part of Idaho the middle of July. (EPQ).

Alfalfa weevil (Hypera postica (Gyll.)) -- Very destructive to alfalfa in northeastern Utah and in Emery County the first week of July. (G. F. Knowlton). Injury to seed crop alfalfa in Big Horn Basin, Wyo. (H. S. Beaudoin).

Plant bugs (Lygus spp.) -- Numerous in some alfalfa fields in northern and central Utah the first half of July. (G. F. Knowlton). Many clover and alfalfa seed fields in the Sacramento Valley of California heavily infested. (H. T. Osborn). These pests at work in alfalfa fields in North Dakota the middle of July. (Weekly Ins. Pest Ins. Bul., N. D. Agr. Coll.).

FRUIT INSECTS

Codling moth (Carpocapsa pomonella (L.)) -- Number of moths taken in eastern New York on July 10 greater than at any time since June 20. Larval entrances were more readily found. By the third week of July in eastern New York all first-brood emerged, except stragglers; in western New York emergence declining. (N. Y. St. Coll. Agr., News Letter). Injury noticeable in a number of orchards at Kearneysville, W. Va., the first week in July. (EPQ). Some increase in infestation in Ohio from July 2 to 12. (C. R. Cutright). Infestation in southern Indiana increased considerably during third week of July. (EPQ). Entrances especially heavy at Orleans, Ind., third week of July. (G. E. Marshall). An increase in infestation in southern Illinois the third week of July. (S. C. Chandler). Heaviest catch of moths in traps at Cape Girardeau in southeastern Missouri on July 11. (Weekly Rept. to Fruit Growers, Univ. Mo.). Home orchards in Salt Lake County, Utah, severely infested. (G. F. Knowlton). Second-brood moths taken in the Yakima Valley of Washington third week of July. (EPQ).

Red-banded leaf roller (Argyrotaemia velutinana (Wlkr.)) -- Abundant in a few orchards in Connecticut first week of July. (P. Garman). Far more abundant in Massachusetts first week of July than 1950. (Spray Message for Fruit Growers, Univ. Mass.). Infestations in the Hudson Valley of New York increased considerably by third week of the month; second-brood egg masses starting to hatch. (N. Y. St. Coll. Agr., News Letter). Population in southern New Jersey large enough third week of July to cause appreciable damage. (A. J.

Farley). Light to moderate infestations of second-brood larvae in localized spots of southern Indiana the middle of month. (EPQ). Young larvae found at Covert, southwestern Michigan, first week of July. (R. Hutson). Large numbers of moths in Crawford County and first emergence in Door County, Wisc., middle of July. (C. L. Fluke). Second-brood larvae reported from central Missouri second week of July. (Weekly Rept. to Fruit Growers, Univ. Mo.).

Oriental fruit moth (*Grapholitha molesta* (Busck)) -- Second-brood injury in peach twigs severe in Burlington County, N. J., excepting where parathion used. (EPQ). Some peach fruits at Fort Valley, Ga., infested. (EPQ). In Ohio second-brood larvae unusually heavy and much twig injury occurred in unsprayed and poorly-sprayed orchards. (R. W. Rings). Indications of being more abundant in northern and eastern Indiana first week of July than in 1950. (EPQ). Adult activity increased in Cape Girardeau district of Missouri third week of July. (Weekly Rept. to Fruit Growers, Univ. Mo.). A few moths taken in baits at Yakima, Wash., third week of July. (EPQ).

Plum curculio (*Conotrachelus nenuphar* (Hbst.)) -- Infestation in peaches at Fort Valley, Ga., considerably lighter than usual. A few complaints of wormy peaches during Early and Regular Elberta peach harvest. (EPQ). Summer-brood adults began emerging in cages at Wooster, Ohio, July 18. In general injury less severe than in 1950. (R. W. Rings). Some injury to apples and peaches in central Missouri first half of July. (Weekly Rept. to Fruit Growers, Univ. Mo.).

Apple maggot (*Rhagoletis pomonella* (Walsh)) -- Flies emerged in numbers in Connecticut on June 19-20--about 10 days earlier than usual. (P. Garman). Heavy emergence of flies in Hudson Valley of New York and at Geneva third week of July. (N. Y. St. Coll. Agr., News Letter). Emergence of adults on blueberry in Michigan started June 30, at Grand Junction, Breedsville, and Hartford, and on apple July 2-9, at Grand Rapids, Okemos, Haslett, East Lansing, and Alden. (R. Hutson). Flies first taken in baits in Crawford County, Wisc., July 14. (C. L. Fluke). First flies in Minnesota taken in Preston and LaCrescent districts, July 6-11, Rochester district, July 11, and Excelsior, Long Lake, and Howard Lake districts, July 13-14. (Minn. Spray Warning Service, Univ. Minn.).

Apple aphid (*Aphis pomi* Deg.) -- Abundant in localized areas of lower Hudson Valley of New York during July. (N. Y. St. Coll. Agr., News Letter). Population large enough in some New Jersey apple orchards middle of July to justify special spray. (A. J. Farley). Severe in some orchards in Ohio third week of July. (C. R. Cutright). Abundant in a few southern Illinois orchards first week of July. (S. C. Chandler). Very abundant throughout Wisconsin during July. (C. L. Fluke). Quite abundant, especially in young orchards in the Yakima Valley of Washington, third week of July. (EPQ).

Cherry fruit fly (*Rhagoletis cingulata* (Loew)) -- A new, light, infestation located by trapping in vicinity of Happy Camp and Scott Bar in Siskiyou County, Calif. These localities in general area of Hamburg in which a heavy infestation was found in 1950. An eradication program in progress. (H. T. Osborn).

A leaf roller (*Amelia pallorana* (Rob.)) -- Very common in Yakima Valley, Wash., last week of July. Attacking apples chiefly, although large numbers on willow and other plants. Most larvae full-grown, a few pupae seen. (EPQ).

European red mite (Paratetranychus pilosus (C. & F.)) -- Populations in some apple and peach orchards in New Jersey heavy enough by the middle of July, unless controlled, to cause serious injury later in season. (A. J. Farley). Abundant in some apple and peach orchards in Maryland middle of July. (T. L. Bissell). Infestations in Ohio increasing on untreated trees third week of the month. (C. R. Cutright). Populations heavy enough in some orchards in southern Indiana late in July to warrant control measures. (EPQ). Abundant on apple, peach, and grape at Orleans, Ind., third week of July. (G. E. Marshall). Scarce in southern Illinois, with light increase in some orchards by middle of July. (S. C. Chandler). A heavy infestation, from 30 to 40 per leaf, reported the middle of July from Kansas City, Mo., district. (Weekly Rept. to Fruit Growers, Univ. Mo.).

Two-spotted spider mite (Tetranychus bimaculatus Harvey) -- Increasing in Hudson Valley third week of July. (N. Y. St. Coll. Agr., News Letter). Increasing on apple, peach, and grape at Orleans, Ind., middle of July. (G. E. Marshall). Occurring in orchards in southern Indiana, but European red mite more abundant. (EPQ). Increasing in southeastern Missouri first week of July. (Weekly Rept. to Fruit Growers, Univ. Mo.).

Citrus whitefly (Dialeurodes citri (Ashm.)) -- Post-spray inspections in Madera and Fresno Counties, Calif., where infestations were found this spring, showed very satisfactory results. A single live adult found in Madera County---none in Fresno County. (H. T. Osborn).

VEGETABLE INSECTS

Mexican bean beetle (Epilachna varivestis Muls.) -- Moderate to heavy in New York. (N. Y. St. Coll. Agr., News Letter). Serious damage in Delaware. (Late News About Insects, Univ. Del.). Moderate to heavy infestations on lima and snap beans in home gardens in Charleston district of South Carolina. (EPQ). Numerous in Gilmer County, Ga. (H. E. Chastain, County Agent). Moderately abundant on remaining beans in southern Georgia, a few on beggarweed and field peas. Hot, dry weather in northwestern Florida has apparently reduced populations. Beetles numerous on remaining beans. Beans severely injured or destroyed in northwestern Tennessee where no control practiced. Moderately abundant at Columbus and Chillicothe, Ohio. Some beans severely damaged. Populations on garden and market beans on western slope of Colorado moderately heavy. Light to moderate on canning and garden beans in Utah. (EPQ). Several hundred acres of beans in Weber County, Utah seriously damaged. (G. F. Knowlton).

Caterpillars on cabbage -- Imported cabbageworm (Pieris rapae (L.)) abundant in Ulster and Erie Counties, N. Y. (N. Y. St. Coll. Agr., News Letter). Cross-striped cabbageworm (Evergestis rimosalis (Guen.)) and the imported cabbageworm moderately abundant on untreated cabbage in northwestern Tennessee. Cabbage caterpillars range from a few to numerous on collards in northwestern Florida. Cabbage webworm (Hellula undalis (F.)) increasing. Imported cabbageworm moderately abundant and cabbage looper (Trichoplusia ni (Hbn.)) relatively scarce at Columbus, Ohio. Eggs and small larvae of imported cabbageworm and cabbage looper numerous on cabbage in southeastern Wisconsin. Light to moderate numbers on cabbage in Utah. Imported cabbageworm, cabbage looper, and diamondback moth (Plutella maculipennis (Curt.)) common on cabbage in home gardens in southern Idaho. (EPQ).

Pea aphid (Macrosiphum pisi (Kltb.)) -- No longer a problem in southern Wisconsin by late July. Some untreated fields almost a total loss. Populations light on late-canning peas in Utah. Peas in Palouse district of Idaho-Washington ripening rapidly and no danger of serious infestation. In Blue Mountain district of Washington-Oregon peas practically all harvested, aphid common in late pea fields, but very little damage. (EPQ). Peas for canning and seed injured in Big Horn Basin, Wyo. (H. S. Beaudoin).

Colorado potato beetle (Leptinotarsa decemlineata (Say)) -- Severe damage to potato in northwestern Tennessee. Adults, larvae, and eggs on early potatoes in southern Idaho. (EPQ).

Potato aphid (Macrosiphum solanifolii (Ashm.)) -- A few present on tomato plants in most fields at Columbus and Chillicothe, Ohio. (EPQ). Winged aphids appearing in potato fields in North Dakota by middle of July, which is earlier than usual. (Weekly Ins. Pest Inf. Bul., N. D. Coll. Agr.).

Potato leafhopper (Empoasca fabae (Harr.)) -- Numerous on potato in Delaware. (Late News About Insects, Univ. Del.). Seriously damaged potatoes in Ashe County, N. C. (J. E. Michael, Sou. Agr. Ins.).

Flea beetles (Halticinae) -- Numerous on cole crops throughout Delaware. Potato flea beetle (Epitrix cucumeris (Harr.)) very abundant on potato at Cheswold. (Late News About Insects, Univ. Del.). Severe damage to potatoes at Columbus, Ohio. Damaging eggplant at Charleston, S. C. and in northwestern Tennessee. Sugar beets on western slope of Colorado damaged. Tuber flea beetle (E. tuberis Gent.) on early potato in the Gilcrest district of northern Colorado and on early and late potato in North Platte Valley of eastern Wyoming and western Nebraska. (EPQ).

Tomato fruitworm (Heliethis armigera (Hbn.)) -- Damage at Mt. Pleasant, Del. (Late News About Insects, Univ. Del.). Moderate on tomato in Winn Parish, La. Light on canning tomatoes on western slope of Colorado. (EPQ).

Hornworms (Protoparce spp.) -- Injurious to tomatoes in Delaware. (Late News About Insects, Univ. Del.). Numerous eggs and a few small larvae on tomato at Charleston, S. C. (EPQ).

Onion thrips (Thrips tabaci Lind.) -- Severe damage to onions in northwestern Tennessee. Light in southern Wisconsin. Populations on market onions requiring control in Utah and western slope of Colorado. Increasing on onions in southern Idaho. Very heavy infestations in late onions in San Gabriel Valley of California. Cucumbers adjacent to onions also severely infested. (EPQ).

Strawberry leaf roller (Ancylis comptana fragariae (W. & R.)) -- Damage to strawberry foliage in Big Horn Basin of Wyoming. (H. S. Beaudoin). Serious damage to young plants at Logan, Utah. (G. F. Knowlton).

Beet leafhopper (Circulifer tenellus (Baker)) -- The average curly-top virus on tomatoes in California was 4.5 percent in Fresno County, and 9.4 percent in Tulare County. A few plantings in both counties show a higher percentage of the disease. In Merced County infection averaged 2.3 percent and in Madera 6.5 percent. Infection occurred so late in life of plants that practically full production obtained. (H. T. Osborn). Not very numerous in Utah. (G. F. Knowlton).

Beet webworm (Loxostege sticticalis (L.)) -- Larvae appearing in several scattered sugar beet fields in North Dakota middle of July. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.). Occurring in sugar beet fields in North Platte Valley of eastern Wyoming and western Nebraska third week of July. (EPQ).

Aphids on tobacco -- Green peach aphid (Myzus persicae (Sulz.)) occured in considerable numbers on some untreated tobacco plants in northwestern Florida. Ninety percent of tobacco in Clarksville district of Tennessee free from aphids. (EPQ).

Hornworms (Protoparce spp.) -- Variable in numbers on tobacco in Georgia. Scarce on tobacco in northwestern Florida. Infestation on tobacco very light in northwestern Tennessee. (EPQ).

COTTON INSECTS

Boll weevil (Anthonomus grandis Boh.) -- Numerous on undusted cotton and a few in poisoned fields in Nansemond County, Va. (J. W. Freeman, County Agt.). Heaviest infestations in North Carolina in Anson, Cabarrus, Edgecomb, Gaston, Halifax, Montgomery, Robeson, Rowan, Scotland, Wake, and Warren Counties. (Cotton News Letter, Ext. Serv. N. C.). Survey records in 18 counties of South Carolina showed 26.9 percent infestation in 54 non-poisoned fields (all fields infested) and 8.8 percent infestation in 54 poisoned fields (44 fields infested). (EPQ). Heaviest infestations in Georgia found in Jasper, Madison, Morgan, Berrien, Butts, Irwin, Jenkins, Meriwether, and Worth Counties. (Ga. Dept. Agr.). Infestations in 59 of 65 fields examined in 10 Alabama counties, chiefly in northwestern section of State. (EPQ). In examination of 938 fields in 46 Mississippi counties, weevils found in 664 fields, infestation averaged 9 percent punctured squares. Of 731 fields examined in 17 Delta counties, 512 infested, average infestation 7 percent. (Weekly Cotton Insect Report, Miss.). Infestation in 499 fields in 21 parishes in Louisiana, averaged 8 percent square infestation. (EPQ). Of 510 fields in 15 counties in Arkansas, infestation averaged 13 percent punctured squares. Heaviest infestations in the southwestern part of State, where average was 28 percent. In southeastern part of State average infestation 7 percent, in northeastern part, 9 percent. (G. Barnes). Of 267 fields examined in 33 counties of Oklahoma, infestation found in 201 fields. Fields with 50 percent or more punctured squares found in Okfuskee, Garvin, Stephens, Muskogee, and Okulgee Counties. (Weekly Cotton Insect Rept. Okla.). Heavy damaging infestations in Texas spotted and mostly in northern and eastern parts of State. Average infestation in 978 fields 16 percent punctured squares. (EPQ).

Bollworms (Heliothis spp. et el) -- Of 217 fields in 57 counties in Georgia, 73 infested. Most abundant in Calhoun County, where damage occurred in 5 percent of 600 squares in 6 fields. Infestations in 30 of 65 fields in 10 counties in Alabama. Fields in Lamar, Lee, Tuscaloosa, and Winston Counties with 6 percent of bolls attacked. Light, but present throughout Mississippi. Light in Texas, with some spotted heavy infestations in northcentral, northeastern, and eastern areas. (State and EPQ cooperating).

Cotton leafworm (Alabama argillacea (Hbn.)) -- First larvae in 1951 taken near Russelltown, Cameron County, Tex., on July 17. (EPQ).

Plant bugs (Lygus spp.) -- Common on cotton in Imperial County, Calif.; present but not destructive in Riverside, Tulare, and Fresno Counties. (H. T. Osborn). Increase in Maricopa County, Ariz. (EPQ).

A leafhopper (Empoasca sp.) -- Far more common than other insect pests of cotton in Palo Verde Valley of Riverside County, Calif. (H. T. Osborn).

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